

## **II. REMARKS**

The final Office Action dated May 14, 2007, has been received and carefully noted. The following remarks and enclosed Declaration are being submitted as a full and complete response thereto.

Claims 1-5, 7-12, and 14-23 are pending.

At this time, claim 5 is canceled. Applicants believe that no new matter is added and respectfully request reconsideration and withdrawal of all rejections. At this time, Applicants also submit a Declaration containing the results of tests on wear resistance.

Entry of this Amendment is proper under 37 C.F.R. § 1.116 since this Amendment: (a) places the application in condition for allowance for reasons discussed herein; (b) does not raise any new issues regarding further search and/or consideration since the Amendment amplifies issues previously discussed throughout prosecution; (c) does not present any additional claims without canceling a corresponding number of finally-rejected claims, and (d) places the application in better form for appeal, should an appeal be necessary. Further, Applicants submit that the Declaration and related remarks are necessary as they are made in reply to arguments raised in the rejection. Entry of this Amendment is thus respectfully requested.

Claim 5 is objected to under 37 C.F.R. § 1.75(c) for being of improper dependent form. Applicants have canceled claim 5, and therefore request reconsideration and withdrawal of the objection.

Claims 1-5, 7-12, and 14-23 were rejected under 35 U.S.C. § 103(a) over Yuki et al. (U.S. Patent No. 6,746,993) (Yuki '993). Applicants traverse the rejection.

Claim 1 of the presently claimed invention is directed to a viscosity index improver which comprises "oil soluble copolymer (A) having a weight-average molecular weight of 3,000 - 500,000 and comprising units of 5-90% by weight of a monomer (a)..., units of 5-90% by weight of at least one monomer (b)..., and units of 5-30% by weight of (c) an unsaturated monomer having at least one group selected from hydroxyl and carboxyl groups" (claim 1) (emphasis added).

Yuki '993 discloses a polymer with carboxyl-containing unsaturated monomers and hydroxyl-containing unsaturated monomers (Yuki '993, col. 7, lines 21-28 and lines 29-65). However, in contrast to the presently claimed invention, Applicants submit that Yuki '993 discloses that the carboxyl-containing monomers and hydroxyl-containing monomers may be present in an amount of 0 to 20% (Yuki '993, col. 8, lines 24-25).

Applicants submit that compositions of the presently claimed invention, which have monomers containing hydroxyl or carboxyl groups in the amounts of 5 to 30%, are unexpectedly superior to compositions containing such monomers in an amount outside the claimed range. Applicants submitted a Declaration in the previous Response of February 23, 2007, which demonstrated this assertion. In particular, the Declaration showed that compositions with hydroxyethyl methacrylate (HEMA, a hydroxyl-containing monomer) and methacrylic acid (MAA, a carboxyl-containing monomer) in weight amounts within the presently claimed range (6% and 25%) had improved wear resistance and a much smaller water mark diameter of a ball, compared to compositions with HEMA and MAA in weight amounts outside the claimed range (4%).

Applicants submit further evidence of the unexpected, superior results of the presently claimed invention in the enclosed Declaration. The enclosed Declaration

compares compositions containing 4-hydroxybuthylmethacrylate (HBMA, a hydroxyl-containing monomer), acrylic acid (AA, a carboxyl-containing monomer), and methacrylic acid (EO) 5 mol adduct (MMAE05, a carboxyl-containing monomer) in weight amounts within the claimed range (6% and 25%, 6% and 15%, and 6% and 25%, respectively), with compositions containing HBMA, AA, and MMAE05 in weight amounts outside the claimed range (4%). Applicants submit that, similar to the previous Declaration, the enclosed Declaration demonstrates that compositions with carboxyl-containing monomers and hydroxyl-containing monomers within the presently claimed range of 5% to 30% have been found to have improved wear resistance compared to compositions with such monomers outside the claimed range (See Declaration, Table 1). Further, Applicants submit that the compositions disclosed in the Declarations, which contain monomers HEMA, MAA, HBMA, AA, and MMAE05, are representative of the copolymers of claim 1. As such, Applicants submit that compositions with HEMA, MAA, HBMA, AA, and MMAE05, like other compositions of the presently claimed invention, demonstrate unexpected results and superior performance.

Applicants submit that based on the teachings of Yuki '993 and without the benefit of hindsight, one of ordinary skill in the art would not know that the presently claimed invention provides such new and unexpected results. For at least the above reasons, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-5, 7-12, and 14-23 under 35 U.S.C. § 103(a) over Yuki '993.

III. **CONCLUSION**

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event this response is not timely filed, the Applicants hereby petition for an appropriate extension of time. The fee for this extension, along with any other additional fees which may be required with respect to this response, may be charged to Deposit Account No. 01-2300, referencing Attorney Docket No. **103176-00003**.

Respectfully submitted,



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Enclosure: Declaration

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